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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,562	05/23/2001	Shanlin Hao	I 69.12-0485	2857
164	7590	06/15/2004	EXAMINER	
KINNEY & LANGE, P.A. THE KINNEY & LANGE BUILDING 312 SOUTH THIRD STREET MINNEAPOLIS, MN 55415-1002			ROSE, ROBERT A	
			ART UNIT	PAPER NUMBER
			3723	

DATE MAILED: 06/15/2004.

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/864,562

Applicant(s)

HAO ET AL.

Examiner

Robert Rose

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-18, 20-24 and 27-30 is/are rejected.
- 7) ☒ Claim(s) 19, 25, 26 and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Receipt is acknowledged of Applicant's Prior Art Statement, filed May 23, 2001.
2. Applicant's election without traverse of Group II in Paper No. 6 is acknowledged.
3. Claims 1-12 have been canceled.
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 13-17, 20-24, and 27-30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Cheprasov et al(US 6045431). Cheprasov et al discloses an apparatus for lapping a row of magnetic head sliders comprising all of the subject matter set forth in applicant's claims above. Note the embodiment of figures 9-10 which show individual actuators assigned to each of the respective slider heads for customized lapping of each individual slider. A sensor is associated with each of the sliders to measure a parameter indicative of stripe height, and comparison is made to a target height to determine when an endpoint for a respective slider is achieved.
6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheprasov et al. To measure the amplitude rather than resistance as an indicator of

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stripe height would have been obvious to those of ordinary skill in the art, since both parameters are routinely used in endpoint detection processes.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dupuis et al is cited of interest to show the known use of electrical lapping guides on the slider itself to save space on the row bar for more sliders. Mowry et al is cited to show MR sensors located on the slider which are used in endpoint determination.

9. Any inquiry concerning this communication should be directed to Robert Rose at telephone number (703) 308-1360.

Robert Rose
Primary Examiner
Art Unit 3723

Rr

June 8, 2004.

A handwritten signature in black ink, appearing to read "Robert Rose", is written over the typed name.